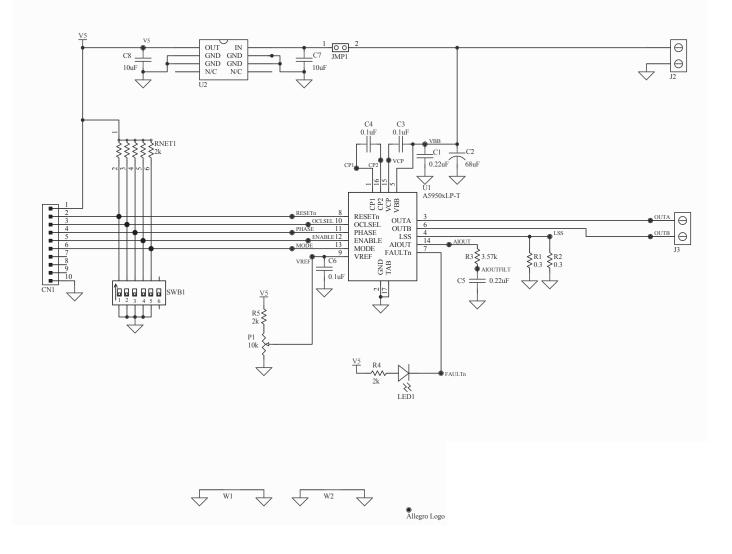


## Demo Board Schematic/Layout

SCHEMATIC

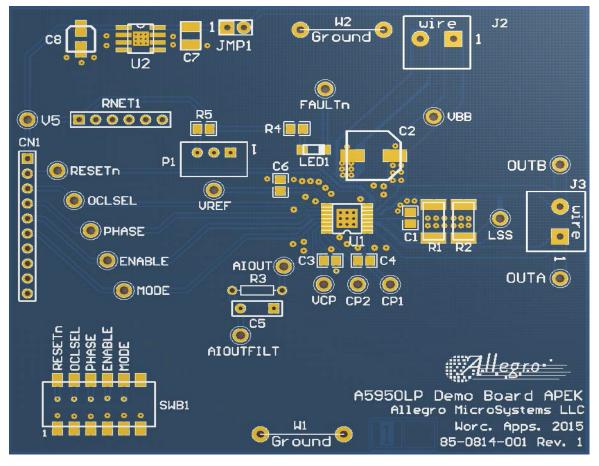


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### Demo Board Schematic/Layout

#### LAYOUT

Clear Bumpon feet to be installed at the four corners of the board on the bottom side. W1 and W2 are to be installed so that there is  $\sim$ 0.3" loop on the top of the board. Board MUST be RoHS compliant.





## Demo Board Schematic/Layout

#### **BILL OF MATERIALS**

Item	Quantity	Designator	value	Description	PartType	Footprint
1		AIOUT, AIOUTFILT, CP1, CP2, ENABLE, FAULTN, LSS, MODE, OCLSEL, OUTA, OUTB, PHASE, RESETN, V5, VBB, VCP, VREF		Large Test Point	Keystone Electronics 5010; Digikey 5010K-ND	PAD 57 125 TP HB
2	1	C1	0.22uF	50V Capacitor	Murata GCM21BR71H224KA37L; Digikey 490-4970-1-ND	0805
3	1	C2	68uF	50V Capacitor	Chemi-Con HHXA500ARA680MHA0G; Digikey 565-4168-1-ND	UCC HA0
4		C3, C4, C6	0.1uF	50V Capacitor	TDK C2012X7R1H104K085AA; Digikey 445-7534-1-ND	0805
5	-	C5	0.22uF	16V Capacitor	TDK FK28X7R1C224K; Digikey 445- 2849-ND	0.2" Cap
6		C7	10uF	50V Capacitor	Taiyo Yuden UMK325BJ106KM-T; Digikey 587-2247-1-ND	1210
7		C8	10uF	16V Capacitor	Chemi-Con EMZA160ADA100MD61G; Digikey 565-2534-1-ND	
	-	CN1, JMP1		10-Pin Male Header (Cut from 50-Pin Strip), Cut pins from 50-pin strip.	SAM1035-50-ND	2-pos. shunt, 10pinUSBConn
9				Bumpon Foot	3M SJ-5303 (CLEAR); Digikey SJ5303- 7-ND	-
10		J2, J3		2-Pin Screw Down Connector	On Shore Technology ED120/2DS; Digikey ED1609-ND	2-pin screw down connector2
11		LED1		Red Surface-mount LED	Lite-On LTST-C150CKT; Digikey 160- 1167-1-ND	1206 LED
12	-	P1	10k	1/2W Potentiometer	Bourns 3299W-1-103LF; Digikey 3299W-103LF-ND	Through-hole Trimpot
13				pcb	85-0814-001 Rev. 1	
14	4 Positions			Sockets for R3 and C5 (Cut from 64 position strip).	Mill-Max 310-43-164-41-001000; Digikey ED6264-ND	
15		R1, R2	0.3	1W Resistor	Yageo RL2512FK-070R3L; Digikey 311-0.3TCT-ND	2512 (6432 Metric)
16		R3	3.57k	1/2W Resistor	Vishay-Dale CMF553K5700FHEB; Digikey CMF3.57KHFCT-ND	AXIAL-0.3
17	_	R4, R5	2k	1/8W Resistor	Panasonic ERJ-6GEYJ202V; Digikey P2.0KACT-ND	0805
18		RNET1	2k	5 Bussed 2k Resistors	Bourns 4606X-101-202LF; Digikey 4606X-1-202LF-ND	6-Pin 0.1" Connector - duplicate
19	-	SWB1		6-Position SPST Switches	C&K Components SDA06H0SBR; Digikey CKN9495CT-ND	SDA06H0SB
20		U1		DC Motor Driver	A5950xLP-T	16-pin_LP
21		U2	5V	Linear Voltage Regulator	National LM2936HVMA-5.0/NOPB; Digikey LM2936HVMA-5.0/NOPB-ND	LM2936HVMA
22	2	W1, W2		22 Gauge Buss Wire (300mils above pcb)		Scope Ground



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#### **Revision History**

Number	Date	Description
_	January 12, 2017	Initial release

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